YSI Environmental, Inc.
Profile and CRADA with U.S. EPA

CRADA

YSI Environmental, Inc. (YSI) and the U.S. EPA have initiated a Cooperative Research and Development Agreement (CRADA) to develop an early warning network that includes water sensors interfaced with data acquisition systems to provide operators a real time alert of intentional or accidental contamination of a drinking water system. The experiments will be conducted on a recirculating test loop and single pass pipe at the Water Awareness Technology Evaluation Research Security (WATERS) Center located at EPA's Test and Evaluation facility in Cincinnati, Ohio. Additional testing may be conducted at secure military facilities. EPA will evaluate the feasibility of developing an early warning system and will prepare a final report documenting the results of this research. This work is in response to EPA's responsibilities for securing the national water infrastructure under Presidential Decision Directive 63.

TECHNOLOGY

YSI equipment monitors standard drinking water parameters such as: oxidation-reduction potential, dissolved oxygen, pH, specific conductance, temperature, and levels of turbidity, chloride, ammonia nitrogen, and nitrate nitrogen. Principles of detection employed in YSI sensors include electrodes, membranes, nephelometric signals and thermistors. YSI's water monitoring equipment is routinely used to monitor source water, but has not typically been used to monitor finished drinking water within a distribution system. Under this CRADA, EPA will provide the technical expertise to develop a method to expose the YSI sensor equipment and technology to drinking water within water distribution pipes. EPA will also conduct controlled experiments to determine the performance of the YSI equipment.

COMPANY INFORMATION

YSI, headquartered in Yellow Springs, Ohio, produces sensor technologies and is dedicated to ecological sustainability. Their water quality sensor technologies are part of their environmental product line that is focused on monitoring source water resources with the most accurate, reliable measuring methods available, and are used worldwide.